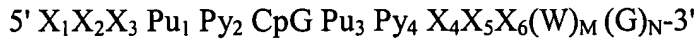


Claims

Claims 1-7 (canceled)

8. (currently amended) A substantially pure or isolated stabilized oligodeoxynucleotide of between 18 and 30~~at least about 16~~ nucleotides in length, comprising a sequence represented by the following formula:



wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10

wherein $X_1 X_2 X_3 Pu_1 Py_2$ and $Pu_3 Py_4 X_4 X_5 X_6$ are self complementary.

Claims 9-11 (canceled)

12. (currently amended) The stabilized oligodeoxynucleotide of claim 8, comprising any one of

GGTGCATCGATGCAGGGGGG (SEQ ID NO: 1);
~~AAGGTCAACG TTGAAAAAAAA (SEQ ID NO: 35);~~
~~GGTGCATCGATGCAGGGGGG (SEQ ID NO: 1);~~
~~GGTGCATCGATGCAGGGGGG (SEQ ID NO: 1);~~
GGTTCGTCGACGCAGGGGGG (SEQ ID NO: 31);
~~GGTTCGTCGATGCAGGGGGG (SEQ ID NO: 7);~~
GGTGCACCGGTGCAGGGGGG (SEQ ID NO: 2); or,
~~GTCGACGTCGAC (SEQ ID NO: 54);~~
GGTGCATCGATGCAGGGGGG (SEQ ID NO: 73);
~~GGCGTCGACG GGG (SEQ ID NO: 74);~~
~~GGTGCATCGATGCGAGAGA (SEQ ID NO: 87);~~
~~TCCGATGTTCTC (SEQ ID NO: 113), or~~
~~GGTCCATCGATCCAGGGGGG (SEQ ID NO: 138).~~

13. (currently amended) The stabilized oligodeoxynucleotide of claim 8, wherein the oligodeoxynucleotide is modified to prevent degradation.

14. (currently amended) The stabilized oligodeoxynucleotide of claim 8, wherein the oligodeoxynucleotide has a phosphate backbone modification.

15. (currently amended) The stabilized oligodeoxynucleotide of claim 14, wherein the phosphate backbone modification is a phosphorothioate backbone modification.

16.-18. canceled

19. (currently amended) An oligodeoxynucleotide delivery complex comprising the stabilized oligodeoxynucleotide of claim 8 and a targeting moiety.

20. (currently amended) The stabilized oligodeoxynucleotide delivery complex of claim 19, wherein the targeting moiety is selected from the group consisting of a cholesterol, a virosome, a liposome, a lipid, and a target cell specific binding agent.

21. (currently amended) The oligodeoxynucleotide delivery complex of claim 19, wherein the stabilized oligodeoxynucleotide and the targeting moiety are covalently linked.

22. (currently amended) A pharmacological composition comprising the stabilized oligodeoxynucleotide of claim 8 and a pharmacologically acceptable carrier.

Claims 23-59 (canceled)

60. (currently amended) The stabilized oligodeoxynucleotide of claim 8, wherein N is at least 5 ~~about 6~~.

61. (currently amended) The stabilized oligodeoxynucleotide of claim 8, wherein Pu₁ Py₂ CpG Pu₃ Py₄ comprise phosphodiester bases.

62. (currently amended) The stabilized oligodeoxynucleotide of claim 61, wherein Pu_1 Py_2 CpG Pu_3 Py_4 are phosphodiester bases.

63. (currently amended) The stabilized oligodeoxynucleotide of claim 61, wherein $X_1X_2X_3$ and $X_4X_5X_6(W)_M(G)_N$ comprise phosphodiester bases.

64. (currently amended) The stabilized oligodeoxynucleotide of claim 61, wherein $X_1X_2X_3$ comprises one or more phosphothioate bases.

65. (currently amended) The stabilized oligodeoxynucleotide of claim 61, wherein $X_4X_5X_6(W)_M(G)_N$ comprises one or more phosphothioate bases.

66. (currently amended) The stabilized oligodeoxynucleotide of claim 8, wherein the oligodeoxynucleotide comprises the sequence

5'-[X_1X_2]TGCATCGATGCAGGGGGG-3' (SEQ ID NO:12);
5'- [X_1X_2]TGCACCGGTGCAGGGGGG-3' (SEQ ID NO:13);
5'- [X_1X_2]TGCGTCGACGCAGGGGGG-3'; (SEQ ID NO:14) ~~15~~; or,
~~5'- X_1X_2 TGCGTCGATGCAGGGGGG-3' (SEQ ID NO:16);~~
5'- [X_1X_2]TGCGCCGGCGCAGGGGGG-3'; (SEQ ID NO:17) [~~;~~];
~~5'- X_1X_2 TGCGCCGATGCAGGGGGG-3' (SEQ ID NO:18);~~
~~5'- X_1X_2 TGCATCGACGCAGGGGGG-3' (SEQ ID NO:19);~~ or,
~~5'- X_1X_2 TGCGTCGGTGCAGGGGGG-3' (SEQ ID NO:20);~~
~~wherein X_1 is a G or not base and X_2 is a G or no base.~~

67. (new) The stabilized oligodeoxynucleotide of claim 66, further comprising at least one additional G in the 5' far flanking region.